

CHAPTER 89-04-07 REQUIREMENTS FOR SEDIMENT CONTROL DEVICES

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89-04-07-01. Sediment control devices. Appropriate sediment control devices shall be constructed and maintained as required by statutes and regulations governing water quality. Such sedimentation control devices shall be constructed in appropriate locations prior to commencement of mining operations.

General Authority: NDCC 28-32-02, 61-02-11, 61-03-13

Law Implemented: NDCC 61-02-14

89-04-07-02. Spillway design. Spillway systems shall be properly located to maximize the distance from the point of inflow into the pond to maximize detention times. Spillway systems shall be provided to safely discharge the peak runoff from a precipitation event with a twenty-five year recurrence interval, or larger event as specified by the state engineer.

General Authority: NDCC 28-32-02, 61-02-11, 61-03-13

Law Implemented: NDCC 61-02-14

89-04-07-03. Requirements for larger ponds. If a sedimentation pond has an embankment that is more than twenty feet [6 meters] in height, as measured from the upstream toe of the embankment to the crest of the emergency spillway, or has a storage volume of twenty acre-feet [24.6 cubic dekameters] or more, the following additional requirements shall be met:

1. An appropriate combination of principal and emergency spillways shall be provided to safely discharge the runoff resulting from a hundred-year, six-hour precipitation event, or larger event as specified by the state engineer.
2. Ponds shall be designed and constructed with an acceptable static safety factor of at least one and one-half for maximum design flood elevation of the pool to ensure embankment slope stability.
3. The minimum top width of the embankment shall not be less than the quotient of $(H+35)/5$ where H is the height of the embankment as measured from the upstream toe of the top of the embankment.

4. Ponds shall have appropriate barriers to control seepage along conduits that extend through the embankment.

General Authority: NDCC 28-32-02, 61-02-11, 61-03-13

Law Implemented: NDCC 61-02-14, 61-16.1-38

89-04-07-04. Certification. All ponds shall be designed and inspected under the supervision of, and certified after construction by, a registered professional engineer.

General Authority: NDCC 28-32-02, 61-02-11, 61-03-13

Law Implemented: NDCC 61-02-14

89-04-07-05. Inspection. All ponds, including those not meeting the size or other criteria of this chapter, shall be examined by the state engineer for structural weakness, erosion, and other hazardous conditions.

General Authority: NDCC 28-32-02, 61-02-11, 61-03-13

Law Implemented: NDCC 61-02-14

89-04-07-06. Discharge structures. Discharges from sedimentation ponds and diversions shall be controlled where necessary using energy dissipators, surge ponds, and other devices to reduce erosion and prevent deepening or enlargement of stream channels and to minimize disturbances to the hydrologic balance.

General Authority: NDCC 28-32-02, 61-02-11, 61-03-13

Law Implemented: NDCC 61-02-14